REMARKS

Claims 1 and 3-6 are now in this Application, and are presented for the Examiner's consideration.

Rejection of Claims under 35 U.S.C. §112

Claims 1-6 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Specifically, it was stated that the fifth to last line of claim 1 requires that the fiber "always travel substantially around a common circular arc ..." It was stated that there is no support for this limitation in the application and it also suggests that this "always" condition does not exist.

This language has been deleted from amended claim 1 herein, thereby overcoming the rejection.

It was also stated that there is no support for the fixing roller immediately following the optical fiber processing apparatus. It was stated that this is similar to a negative limitation by prohibiting any additional structure in a specific location merely to avoid the prior art. However, applicant respectfully disagrees, and urges the Examiner to reconsider. There is no negative limitation, but rather, only a positive limitation which limits the structure. The examples given from the MPEP 2173.05(i) are very different and do include negative

limitations of "R is an alkenyl radical other than ..." This is basically stating the R is an alkenyl radical but is not, which is a negative limitation. In like manner, the other example of "said homopolymer being free from the proteins ..." is also a negative limitation, and is the equivalent of said homopolymer not including the proteins..." These, however, are very different from a positive structural limitation which does not use any negative limitation language. The present positive limitation is equivalent to an electric circuit limitation which states that the input of circuit A is connected to the output of circuit B, and in such case, circuit A would immediately follow circuit B. This, however, as with the present claim 1, is not a negative limitation.

It is noted that claim 1 has been amended to recite that the fixing roller immediately follows the optical fiber standard value controller unit.

Original claim 7 of the application recited that the optical fiber standard value controller unit comprises an optical fiber diameter controller unit adapted to measure and control the diameter of the optical fiber; and an optical fiber fabricating unit adapted to process an optical fiber that the diameter of the same is measured. This would correspond to elements 13-16 in Fig. 3, and it is clear that the fixing roller 17 immediately follows the optical fiber standard value controller unit 13-16,

in order to provide support for this limitation.

Accordingly, it is respectfully submitted that the rejection of claims 1-6 under 35 U.S.C. §112, first paragraph, has been overcome.

Claims 1-6 were further rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

It was stated that the terms "adjusted curvature radius," "circular arc" and "curvature radius" are not sufficiently defined in the specification to support the same in the claims. It was stated that the plain meaning of "radius" is substantially along the lines of "a line segment extending from the center of a circle to the circumference," but what is shown in Fig. 3 of the present application is not a circle. It was further stated that, while Fig. 3 is somewhat like a circle, there is no indication as to how one determines what the radius R2 is.

These terms have been deleted from claim 1, thereby overcoming this rejection. It is noted that the only recitation now in claim 1 is as to gradually adjusting a curvature of the optical fiber in regard to the recitation of the at least two movable rollers. Clearly, as shown in Fig. 3, there is a curvature of the optical fiber.

Still further, it was stated that the term "processing apparatus" is deemed to be too indefinite as to its meaning. In

this regard, as discussed above, claim 1 has been amended to delete reference to the processing apparatus, and instead, use the phrase "optical fiber standard value controller unit" for which there is clear support in the specification.

Accordingly, it is respectfully submitted that the rejection of claims 1-6 under 35 U.S.C. §112, second paragraph, has been overcome.

Prior Art Rejections

Claim 1 was rejected under 35 U.S.C. §102(b) or 35 U.S.C. §102(e) as being anticipated by PCT Patent Publication No. WO 00/44680 to Yoshida et al or U.S. Patent No. 6,519,404, which is its equivalent.

In Yoshida et al, the only rollers that move in a translation direction, rather than a swinging sense, are rollers 4 and 5 in Fig. 2. Guide rollers 4 and 5, however, only move together between the lower position 4', 5' and the upper position 4, 5 in Fig. 2. There is no disclosure or suggestion that they are independently mounted on different brackets for separate movement, for example, in different directions. In fact, Yoshida et al states at column 6, lines 39-41 that "[t]he movement of the movable guide rollers can be implemented, for example, by use of a guide rail and a chain not illustrated" (emphasis added). In other words, there is a single guide rail for both rollers 4, 5

in Yoshida et al, because both rollers 4, 5 are moved in the same direction, at the same time, and for the same distance.

With the present invention, the optical fiber between the fixing roller and the winding apparatus is substantially circular. To achieve this object, the moving rollers 18, 19 must be able to move, respectively, in <u>different</u> directions while guiding the fiber. Thus, each roller 18, 19 is <u>separately</u> mounted on a separate bracket 10 which thereby permits movement of rollers 18, 19 in different directions. For support for this limitation, see, for example, page 13, lines 4-6 of the present application, which discloses a plurality of brackets 10 which may be provided after the fixing roller in order to reciprocate the moving rollers 18, 19.

As discussed above, Yohsida et al does not disclose or even remotely suggest that the two moving rollers are mounted for movement, respectively, in different directions, in order to reduce the stress on the fiber. Further, there would not be any need to do so in Yoshida et al since Yoshida et al is not concerned with providing a circular path of travel for the fiber, but rather, rollers 4, 5 are provided to increase the length of the free zone, and thereby provide a greater length over which the optical fiber can untwist. Thus, there is no suggestion in Yoshida et al, nor any logical reason, to provide separate movement of rollers 4, 5. In fact, separate movement of rollers

4, 5 in different directions may result in more twisting of the fiber, contrary to the teachings of Yoshida et al, such that Yoshida et al would teach away from separate movement of rollers 18, 19.

In this regard, the limitations of claim 2 have been effectively incorporated into claim 1, so that claim 1 now recites "at least two brackets, each bracket connected to a respective one of said at least two movable rollers to provide translation movement of the respective one of said at least two movable rollers in at least one translation direction relative to the optical fiber."

As discussed above, each roller 18, 19 is mounted to a separate bracket 10. The specification teaches that each roller 18, 19 can move in a translation direction in a slot or vertical direction guide 21 of the respective bracket 10, and also, each bracket 10 can pivot around pivot joint 22. Thus, each roller 18, 19 is movable in X- and Y- directions in translation, separately from each other.

This is also distinguished from roller 23 of Yoshida et al, for example, which only rotates about its own axis as shown in Fig. 4 thereof, and does not move in a translation direction.

It must be also pointed out that it is not just the fact that two rollers can be moved independently, but rather, the fact that two rollers can move in translation on separate brackets,

and thereby independently of each other in the context of the present claimed invention of an optical fiber drawing apparatus.

Accordingly, it is respectfully submitted that the rejection of claim 1 under 35 U.S.C. §102(b) or 35 U.S.C. §102(e), has been overcome.

Claims 2-6 were rejected under 35 U.S.C. §103(a) as being obvious from Yoshida '404 and U.S. Statutory Invention Registration No. H1268 to Askins et al.

The remarks previously made above in regard to Yoshida et al are incorporated herein by reference.

Askins et al was merely cited for disclosing the use of a bracket to move a roller. However, in all other respects, Askins et al fails to cure any of the aforementioned deficiencies of Yoshida et al.

Specifically, L-shaped bracket 62 was noted for mounting two idler rollers 60. However, the idler rollers 60 are both mounted on the same bracket 62. See column 5, lines 58-63. Thus, if bracket 62 is moved, both idler rollers 60 move therewith. Therefore, even if Askins et al is combined with Yoshida et al, the claimed present invention would still not be disclosed or suggested in which there are at least two brackets, each bracket connected to a respective one of said at least two movable rollers to provide translation movement of the respective one of

said at least two movable rollers in at least one translation direction relative to the optical fiber.

In other words, amended claim 1 provides for each movable roller to be connected to a separate bracket, and each movable roller movable by this arrangement in a translation direction. There is no disclosure or even a remote suggestion in the cited references for each roller to be connected to its own bracket for movement in a translation direction, which would thereby permit separate and independent translation movement of the rollers 18, 19.

Accordingly, it is respectfully submitted that the rejection of claims 2-6 under 35 U.S.C. §103(a) has been overcome.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

In the event that this Paper is late filed, and the necessary petition for extension of time is not filed concurrently herewith, please consider this as a Petition for the requisite extension of time, and to the extent not tendered by check attached hereto, authorization to charge the extension fee, or any other fee required in connection with this Paper, to Account No. 07-1524.

The Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1524.

In view of the foregoing amendments and remarks, it is respectfully submitted that Claims 1 and 3-6 are allowable, and early and favorable consideration thereof is solicited.

Respectfully submitted,

Richard M. Goldberg
Attorney for Applicants
Registration No. 28,215

25 East Salem Street
Suite 419
Hackensack, New Jersey 07601
TEL (201) 343-7775
FAX (201) 488-3884
e-mail: goldbergpat@earthlink.net